

DECLARATION FOR PATENT APPLICATION

As one of the below named inventors, I hereby declare that:

My residence, post office address and citizenship is as stated below next to my name.

I believe I am one of the original and joint inventors of the subject matter which is claimed and for which a patent is sought on the invention entitled

**ECHO CANCELLER EMPLOYING DUAL-H ARCHITECTURE
HAVING VARIABLE ADAPTIVE GAIN SETTINGS**

the specification of which was filed in the United States Patent and Trademark Office as application Serial No. 08/970,874, on November 14, 1997.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, § 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed. NONE

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application.

I hereby appoint the following attorneys and/or agents to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

Kenneth J. Rudofski	Reg. No. 35,997
George P. McAndrews	Reg. No. 22,760
John J. Held	Reg. No. 21,061
Timothy J. Malloy	Reg. No. 25,600
William M. Wesley	Reg. No. 26,521
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Herbert D. Hart III	Reg. No. 30,063
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George Wheeler	Reg. No. 28,766
Janet M. McNicholas	Reg. No. 32,918
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Christopher C. Winslade	Reg. No. 36,308
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Gregory C. Schodde	Reg. No. 36,668
Edward W. Remus	Reg. No. 25,703
Donald J. Pochopien	Reg. No. 32,167
Sharon A. Hwang	Reg. No. 39,717
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James P. Murphy	Reg. No. 40,741
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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Information about first inventor:

(given name, family name): **Kenneth P. Laberteaux**
Residence: 609 E. Oakside St.
South Bend, IN 46614

Citizenship: USA
Post Office Address: Same

First inventor's signature: Kenneth P. Laberteaux

Date Signed: May 20, 1998

Information about second inventor:

(given name, family name): **Richard C. Younce**
Residence: 64878 County Rd. 3
Wakarush, IN 46573

Citizenship: USA
Post Office Address: Same

Second inventor's signature: Richard C. Younce

Date Signed: 5/6/98

Information about third inventor:

(given name, family name): **Bruce E. Dunne**
Residence: 33 Redstart Rd.
Naperville, IL 60565

Citizenship: USA
Post Office Address: Same

Third inventor's signature: _____



Date Signed: _____

5/28/98

Information about fourth inventor:

(given name, family name): **David S. Farrell**
Residence: 4420 Basswood Dr.
Lisle, IL 60532

Citizenship: USA
Post Office Address: Same

Fourth inventor's signature: _____



Date Signed: _____

5/28/98

ASSIGNMENT

Attorney Case No. 12000US01
Inventor: **Kenneth P. Laberteaux**
Richard C. Younce
Bruce E. Dunne
David S. Farrell

Serial No.: 08/970,874
Filing Date: 11.14.97

In consideration of One Dollar (\$1.00) and other good and valuable considerations in hand paid, the receipt and sufficiency of which is hereby acknowledged, the undersigned hereby assigns to **Tellabs Operations, Inc.**, a corporation of Delaware, its successors and assigns, the entire right, title and interest in the invention or improvements of the undersigned disclosed in an application for Letters Patent of the United States, entitled **"Echo Cancellor Employing Dual-H Architecture Having Variable Adaptive Gain Settings,"** and identified as U.S.S.N. 08/970,874, filed November 14, 1997, in the United States Patent and Trademark Office, and in any and all other applications, both United States and foreign, which the undersigned may file, either solely or jointly with others, on said invention or improvements, and in any and all Letters Patent of the United States and foreign countries, which may be obtained on any of said applications, and in any reissue or extension of such patents, and further assigns to said assignee the priority right provided by the International Convention.

The undersigned hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any said Letters Patent to said assignee.

The undersigned warrants himself to be the owner of the entire right, title, and interest in said invention or improvements and to have the right to make this assignment, and further warrants that there are no outstanding prior assignments, licenses, or other encumbrances on the interest herein assigned.

For said considerations, the undersigned hereby agrees, upon the request and at the expense of said assignee, its successors and assigns, to execute any and all divisional, continuation, continuation in part, and substitute applications for said invention or improvements, and any necessary oath, affidavit or declaration relating thereto, and any application for the reissue or extension of any Letters Patent that may be granted upon said application, and any and all applications and other document for Letters Patent in foreign countries on said invention or improvements, that said assignee, its successors or assigns may deem necessary or expedient, and for the said considerations the undersigned authorizes said assignee to apply for patents for said invention or improvements in its own name in such countries where such procedure is proper and further agrees, upon the request of said assignee, its successors and assigns, to cooperate to the best of the ability of the undersigned with said assignee, its successors and assigns, in any proceedings or transactions involving such applications or patents, including the preparation and execution of preliminary statements, giving and producing

evidence, and performing any and all other acts necessary to obtain said Letters Patent, both United States and foreign, and vest all rights therein hereby conveyed in the assignee, its successors and assigns, whereby said Letters Patent will be held and enjoyed by the said assignee, its successors and assigns, to the full end of the term for which said Letters Patent will be granted, as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment had not been made.

WITNESS my hand and seal this 20 day of May, 19 98.

Kenneth P. Laberteaux
Kenneth P. Laberteaux

State of Indiana

County of ST. Joseph

The foregoing instrument was acknowledged before me this 20th day of May, 19 98 by Sherrie L. Miller.

SHERRIE L. MILLER
NOTARY PUBLIC STATE OF INDIANA
ST JOSEPH COUNTY
MY COMMISSION EXP. SEPT 22, 2000

Sherrie L. Miller
Notary Public

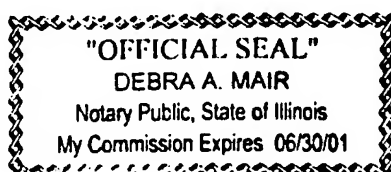
WITNESS my hand and seal this 6 day of May, 19 98.

Richard C. Younce
Richard C. Younce

State of Illinois

County of Will

The foregoing instrument was acknowledged before me this 24 day of May, 19 98 by Debra A. Maier.



Debra A. Maier
Notary Public

WITNESS my hand and seal this 28 day of May, 19 98.

Bruce E. Dunne
Bruce E. Dunne

State of Illinois

County of Will

The foregoing instrument was acknowledged before me this 28th day of

May, 19 98 by Bruce E. Dunne.



Robyn Goldman
Notary Public

WITNESS my hand and seal this 28 day of May, 19 98.

David S. Farrell
David S. Farrell

State of Illinois

County of Will

The foregoing instrument was acknowledged before me this 28th day of

May, 19 98 by David S. Farrell.



Robyn Goldman
Notary Public